

CLAIMS

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1. A positive photoresist composition formed by dissolving (A) photosensitive novolak resin comprising an alkali soluble novolak resin wherein some hydrogen atoms within those of all phenolic hydroxyl groups of the alkali soluble novolak resin are substituted by 1,2-naphthoquinone diazide sulfonyl groups, in (B) an organic solvent containing a propylene glycol alkyl ether acetate.

2. The positive photoresist composition according to claim 1, wherein the alkali soluble novolak resin has the following characteristics (1) - (3):

(1) a polystyrene equivalent weight average molecular weight of 1000 to 30000,
10 (2) a degree of dispersion of 25 or less, and (3) a rate of solution to a 2.38 % by weight TMAH (tetra-methyl ammonium hydroxide) aqueous solution at 23 °C is 10 to 1000Å/s, and wherein the proportion of substitution of the hydrogen atoms within those of all
15 phenolic hydroxyl groups of the alkali soluble novolak resin by 1,2-naphthoquinone diazide sulfonyl group is 2 to 20 mol %.

3. The positive photoresist composition according to claim 1, wherein the propylene glycol alkyl ether acetate is propylene glycol methyl ether acetate.

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4. The positive photoresist composition according to claim 1, wherein the organic solvent (B) contains a solvent other than the propylene glycol alkyl ether acetate.

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5. The positive photoresist composition according to claim 4, wherein the rate of the propylene glycol alkyl ether acetate in the organic solvent (B) is 50 to 90 weight %.

6. The positive photoresist composition according to claim 4, wherein the solvent other than the propylene glycol alkyl ether acetate is ethyl lactate.

7. A resist pattern formation method comprising the steps of coating a positive photoresist composition according any one of Claims 1 to 6 on a substrate, prebaking the coated film, selectively exposing the film, and subsequently alkali developing the film.

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